

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-010008**Date Inspected:** 30-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Wang Chung Ging, Li Jia**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower/OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

TOWER ASSEMBLY/ JETTY

This QA Inspector randomly observed the following work in progress.

EAST TOWER LIFT # 1

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 062126 performing Flux Core Arc Welding process for the weld joint ESD1-A167B/H-36 located on PCMK skin B stiffener to base plate of East tower lift #1. ZPMC QC Mr. Zhou Yu monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2332-TC-P5-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 040736 performing Flux Core Arc Welding process for the weld joint ESD1-A167B/H-103 located on PCMK skin E stiffener to base plate of East tower lift #1. ZPMC QC Mr. Zhou Yu monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2133.

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SOUTH TOWER LIFT #4

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 040489 performing Submerged Arc Welding process for the weld joint SSTL4-1B/L -4A located on PCMK South tower lift #4. ZPMC QC Mr. Li Ming monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2221-C-U2B-S2.

This Quality Assurance (QA) Inspector observed ZPMC qualified welders 207745, 201750 performing Submerged Arc Welding process for the weld joint SSTL4-1B/L -5A located on PCMK South tower lift #4. ZPMC QC Mr. Li Ming monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2221-C-U2B-S2.

NORTH TOWER LIFT #4

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 053116 performing Flux Core Arc Welding process for the weld joint NSTL4-3J/L -113 located on PCMK North tower lift #4. ZPMC QC Mr. Wan Wen Zhong monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-4332-TC-P5-F-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 052075 performing Flux Core Arc Welding process for the weld joint NSTL4-3J/L -107 located on PCMK North tower lift #4. ZPMC QC Mr. Wan Wen Zhong monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-4332-TC-P5-F-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 057266 performing Flux Core Arc Welding process for the weld joint NSTL4-3I/L -39 located on PCMK North tower lift #4. ZPMC QC Mr. Wan Wen Zhong monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-4332-TC-P5-F-1.

TRIAL ASSEMBLY YARD

This QA Inspector randomly observed the following work in progress.

OBG SEGMENT 1AAW- 1AW

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 048659 performing Shielded Metal Arc Welding process for the weld joint OBW1-001 on the excavated areas located on PCMK deck panel splice weld joint between of OBG segment 1AAW and 1AW. The Y location measured approximately 18750mm and 17000mm from counter weight side. ZPMC QC Mr. Zhoi Zheng monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-1G (1F)-FCM- Repair-1. The critical weld repair report identified as B-CWR876.

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NORTH TOWER LIFT # 1

This Caltrans Quality Assurance (QA) Inspector observed ZPMC personnel performing buttering welds at the end of the third stiffener on skin E from skin D on north tower lift #1 using the Flux Cored Arc Welding (FCAW) process. ZPMC personnel performed this 2F position welding using the welding parameters based on the 3F position weld procedure. The 3F (WPS-345-FCAW-3G (3F)-Repair) welding parameters are not acceptable for welding in the 2F position (WPS-345-FCAW-2G (2F)-Repair). For additional information see attached photos. Incident report was issued.

Unless otherwise noted, all work observed on this dated appeared to generally comply with applicable contract documents.



Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod 13482570045, who represents the Office of Structural Materials for your project.

Inspected By: Utekar,Shrikant

Quality Assurance Inspector

Reviewed By: Dawson,Paul

QA Reviewer